

**Commonwealth of Kentucky  
Division for Air Quality**

**PERMIT APPLICATION SUMMARY FORM**

Completed by: Joshua J. Higgins

GENERAL INFORMATION:

Name:	Marathon Ashland Petroleum LLC (MAPLLC) Marine Repair Terminal (MRT)
Address:	U.S. 23 and 13th Street, Catlettsburg, KY 41129
Date application received:	September 17, 2002
SIC/Source description:	3731 / Ship Building and Repair
AFS (10-digit) Plant ID:	21-019-00016
Application log number:	55009
Permit number:	V-99-028, Revision 1

APPLICATION TYPE/PERMIT ACTIVITY:

<input type="checkbox"/> Initial issuance	<input type="checkbox"/> General permit
<input checked="" type="checkbox"/> Permit modification	<input type="checkbox"/> Conditional major
__Administrative	<input checked="" type="checkbox"/> Title V
__Minor	<input type="checkbox"/> Synthetic minor
_x_Significant	<input checked="" type="checkbox"/> Operating
<input type="checkbox"/> Permit renewal	<input type="checkbox"/> Construction/operating

COMPLIANCE SUMMARY:

<input type="checkbox"/> Source is out of compliance	<input type="checkbox"/> Compliance schedule included
<input type="checkbox"/> Compliance certification signed	

APPLICABLE REQUIREMENTS LIST:

<input type="checkbox"/> NSR	<input checked="" type="checkbox"/> NSPS	<input checked="" type="checkbox"/> SIP
<input type="checkbox"/> PSD	<input checked="" type="checkbox"/> NESHAPS, MACT	<input type="checkbox"/> Other
<input type="checkbox"/> Netted out of PSD/NSR	<input type="checkbox"/> Not major modification per 401 KAR 51:017, 1(23)(b) or 51:052,1(14)(b)	

MISCELLANEOUS:

- ☐ Acid rain source
- ☐ Source subject to 112(r)
- ☐ Source applied for federally enforceable emissions cap
- ☐ Source provided terms for alternative operating scenarios
- ☒ Source subject to a MACT standard
- ☐ Source requested case-by-case 112(g) or (j) determination
- ☐ Application proposes new control technology
- ☒ Certified by responsible official
- ☒ Diagrams or drawings included
- ☐ Confidential business information (CBI) submitted in application
- ☐ Pollution Prevention Measures
- ☐ Area is non-attainment (list pollutants):

## EMISSIONS SUMMARY

Pollutant	Actual (tpy)	Potential (tpy)
PM/PM <sub>10</sub>	0.26	1.18
SO <sub>2</sub>	0.02	0.09
NO <sub>x</sub>	3.09	15.56
CO	2.59	13.07
VOC	14.12 with controls	1573.09
LEAD		
<b>TOTAL HAPS</b>	8.33	57.90
<i>n-hexane</i>	2.61	18.37
<i>Xylene</i>	2.35	16.51
<i>Benzene</i>	2.13	14.98

### SOURCE PROCESS DESCRIPTION:

The Marathon Ashland Petroleum Marine Repair Terminal consists of:

- a) Truck Unloading station (Lube Oil)
- b) Truck Loading station \* (Heavy Oil, Light Oil and Styrene)
- c) Seven Black Fixed Roof Storage Tanks, three of which are oil, water separators
- d) One Internal Flotation Roof Storage Tank
- e) Barge Painting
- f) Hot Water Barge Cargo area Cleaning and Steam Generating Thermal Oxidizer (SGTO)
- g) Two Boilers: One 10.2mmBtu/hr and one 12.5mmBTU/hr
- h) Various pipeline equipment: pumps, valves and flanges.
- i) Barge Loading of Light Rerun and Heavy Rerun.

\*- Not in operation as of the date of the last inspection.

The two boilers provide hot water for cleaning the empty barges. These boilers are fired with either natural gas or #2 fuel oil. No surfactants or additives are used in the barge cleaning process. The tanker shell clingage along with the displaced vapor was vented directly to the atmosphere, but is now vented to the SGTO. The SGTO is fired with natural gas. The contents of the barge are vacuum pumped into the various storage tanks/oil-water separators or to the truck loading rack. The truck loading rack has not operated for several years and may be demolished and removed from the site. There are also two Dissolved Air Flootation units for treatment of water before it is piped to the city sewer system.

**Types of control:**

The permit requires that Barge Cleaning operations use a control system that is at least 90% efficient. Testing on the control system described below on January 11, 2002 indicated a destruction efficiency of 99.6%.

Type: Steam Generating Thermal Oxidizer (SGTO)  
Model: SSE-2K-300-SGTO  
Manufacturer: Ship and Shore Environmental  
Burner/Combustion Chamber: Eclipse Ratiomatic 1500RM  
Fuel: Natural Gas  
Rated capacity: 14 mmBtu/hr  
Date constructed: January 2002

**EMISSION AND OPERATING CAPS DESCRIPTION:**

Regulation 40 CFR 63 Subpart II, National emission standards for shipbuilding and ship repair (surface coating), applies to the source's barge painting operation. Pursuant to the MACT, the painting operation will be limited to coatings to which thinning solvents will not be added (40 CFR 63.785(c)(1)).

**OPERATIONAL FLEXIBILITY:**

As long as the vapor pressures of the liquids stored in the various storage tanks do not trigger new or existing source applicable requirements, the source is free to clean barges of almost any type. However, the Division has concluded that non-CTG RACT applies to the barge cleaning operation. The permit therefore contains requirements that this operation be controlled.